

Docket No. AUS9-2000-0414-US1

ABSTRACT OF THE DISCLOSURE

**ENHANCED INTERFACE THERMOELECTRIC COOLERS WITH ALL-METAL
5 TIPS**

A thermoelectric device with improved efficiency is provided. In one embodiment, the thermoelectric device includes a first thermoelement and a second thermoelement 10 electrically coupled to the first thermoelement. An array of first tips are in close physical proximity to, but not necessarily in physical contact with, the first thermoelement at a first set of discrete points. An array of second tips are in close physical proximity to, 15 but not necessarily in physical contact with, the second thermoelement at a second set of discrete points. The first and second conical are constructed entirely from metal, thus reducing parasitic resistances.

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